NEWS IPC8

Welcome to STN International! Enter x:x LOGINID: SSSPTA1623PAZ PASSWORD: TERMINAL (ENTER 1, 2, 3, OR ?):2 * * * * * * * * * * Welcome to STN International Web Page for STN Seminar Schedule - N. America NEWS NEWS JAN 02 STN pricing information for 2008 now available NEWS JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances NEWS JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats NEWS 5 JAN 28 MARPAT searching enhanced NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication JAN 28 NEWS TOXCENTER enhanced with reloaded MEDLINE segment NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements NEWS 9 FEB 08 STN Express, Version 8.3, now available NEWS 10 FEB 20 PCI now available as a replacement to DPCI NEWS 11 FEB 25 IFIREF reloaded with enhancements NEWS 12 FEB 25 IMSPRODUCT reloaded with enhancements NEWS 13 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification IFICDB, IFIPAT, and IFIUDB enhanced with new custom NEWS 14 MAR 31 IPC display formats NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental NEWS 16 MAR 31 CA/CAplus and CASREACT patent number format for U.S. applications updated NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements NEWS 19 APR 04 STN AnaVist, Version 1, to be discontinued NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats EMBASE Controlled Term thesaurus enhanced NEWS 21 APR 28 NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements NEWS 23 MAY 30 INPAFAMDB now available on STN for patent family searching NEWS 24 MAY 30 DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option NEWS 25 JUN 06 EPFULL enhanced with 260,000 English abstracts NEWS 26 JUN 06 KOREAPAT updated with 41,000 documents NEWS 27 JUN 13 USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008 STN Operating Hours Plus Help Desk Availability NEWS HOURS NEWS LOGIN Welcome Banner and News Items

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FILE 'HOME' ENTERED AT 06:11:32 ON 16 JUN 2008

=> e regl
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
The EXPAND command is used to look at the index in a file
which has an index. This file does not have an index.

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
0.21 0.21

FULL ESTIMATED COST

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http://www.cas.org/support/stngen/stndoc/properties.html

=> logoff hold COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.46 0.67

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:12:14 ON 16 JUN 2008

Connecting via Winsock to STN

LOGINID: SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 06:33:40 ON 16 JUN 2008 FILE 'REGISTRY' ENTERED AT 06:33:40 ON 16 JUN 2008 COPYRIGHT (C) 2008 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 0.46 0.67

 \Rightarrow e 2,4-Hexadienoic acid, 5-phenyl-, (E,E)-/cn 2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER, (E,E)-/CN 2,4-HEXADIENOIC ACID, 5-NITRO-8-QUINOLINYL ESTER/CN E2 1 1 --> 2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN E3 2,4-HEXADIENOIC ACID, 5-PHENYL-, (Z,E)-/CN E41 2,4-HEXADIENOIC ACID, 5-PHENYL-, BUTYL ESTER, (2E,4E)-/CN E5 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, ETHYL ESTER, (E,Z)-/CN Ε6 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER/CN E7 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (2E,4E)-/CN E8 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,?)-/CN E9 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,E)-/CN E10 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (Z,?)-/CN E11 1 2,4-HEXADIENOIC ACID, 6,6,6-TRICHLORO-/CN 1 E12 => e3

L11 "2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-"/CN

=> d 11

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN T.1

28028-84-4 REGISTRY RN

Entered STN: 16 Nov 1984 ED

2,4-Hexadienoic acid, 5-phenyl-, (E,E)- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Sorbic acid, 5-phenyl-, (E,E)- (8CI)

STEREOSEARCH FS

MFC12 H12 O2

BEILSTEIN*, CA, CAPLUS LC STN Files:

(*File contains numerically searchable property data)

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 8.53 8.74 FILE 'CAPLUS' ENTERED AT 06:34:56 ON 16 JUN 2008
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FILE COVERS 1907 - 16 Jun 2008 VOL 148 ISS 25 FILE LAST UPDATED: 15 Jun 2008 (20080615/ED)

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http://www.cas.org/legal/infopolicy.html

=> 11

L2 2 L1

=> d 12 1-2 ti fbib abs

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

TI Structure-antitranspirant activity relation in a series of abscisic acid analogs

AN 1992:2232 CAPLUS

DN 116:2232

OREF 116:459a,462a

TI Structure-antitranspirant activity relation in a series of abscisic acid analogs

AU Dimoglo, A. S.; Ustyugov, V. A.; Popa, D. P.; Kuchkova, K. I.

CS Inst. Khim., Kishinev, USSR

SO Buletinul Academiei de Stiinte a Republicii Moldova, Stiinte Biologice si Chimice (1991), (1), 49-55 CODEN: IAMNEN; ISSN: 1019-5289

DT Journal

LA Russian

GT

$$\begin{array}{c|c} \operatorname{CR}^2 = \operatorname{CHCR}^1 = \operatorname{CHCO}_2\operatorname{H} \\ \end{array}$$

AB Consideration of electronic-topol. matrixes of 46 I (R = e.g., H, Cl, Me, or OMe, Rl and R2 = H or Me; 2,3-E or Z) demonstrated that the surface of the triangle formed by neg. charged atoms, the perimeter/surface ratio, and the ratio of the total charge of these atoms to the triangle surface determine the antitranspirant activity of I in barley. Linear positioning of the 3 neg. charged moieties, the absence of the neg. center in the aromatic ring, and the absence of Me at the pentadienoic acid radical made I

inactive. A cis-trans isomerization interaction with the positioning of the moiety in the aromatic ring was essential for activity. Me at C4 was best positioned for the activity. Steric factors also affected activity. The effectiveness of these criteria for the selection of antitranspirants is illustrated using the known antitranspirant vomifoliol.

- L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Influence of the substituent and the geometry of the double bond on dissociation constants of cinnamylideneacetic acids
- AN 1970:110633 CAPLUS
- DN 72:110633
- OREF 72:19963a,19966a
- TI Influence of the substituent and the geometry of the double bond on dissociation constants of cinnamylideneacetic acids
- AU Molho, Darius; Giraud, Michel
- CS Lab. Chim., Museum Nat. Hist. Natur., Paris, Fr.
- SO Bulletin de la Societe Chimique de France (1969), (12), 4447-52 CODEN: BSCFAS; ISSN: 0037-8968
- DT Journal
- LA French
- GI For diagram(s), see printed CA Issue.
- AB trans, trans-Cinnamylideneacetic acids I are more acidic than acids II. The acidity of ring substituted acids follows a Hammett relation. $\beta\text{-Methylcinnamylideneacetic}$ acids are less acidic than the $\delta\text{-methyl}$ acids. Steric factors have very little effect.

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	14.94	23.68
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.60	-1.60

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http://www.cas.org/support/stngen/stndoc/properties.html

```
2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (Z,E)-/
Ε1
              1
                    CN
                    2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER/CN
E_2
              1
                --> 2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER, (E,E)-/CN
E3
              1
                    2,4-HEXADIENOIC ACID, 5-NITRO-8-QUINOLINYL ESTER/CN
E4
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN
E5
              1
E6
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (Z,E)-/CN
Ε7
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, BUTYL ESTER, (2E,4E)-/CN
Ε8
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, ETHYL ESTER, (E,Z)-/CN
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER/CN
E9
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (2E,4E)-/CN
E10
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,?)-/CN
E11
              1
E12
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,E)-/CN
=> e e1
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (2E,4E)
              1
E1
                    -/CN
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (E,E)-/
E2
              1
                    CN
              1 --> 2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (Z,E)-/
Е3
                    CN
E4
              1
                    2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER/CN
                    2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER, (E,E)-/CN 2,4-HEXADIENOIC ACID, 5-NITRO-8-QUINOLINYL ESTER/CN
E5
              1
              1
E.6
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN
E7
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (Z,E)-/CN 2,4-HEXADIENOIC ACID, 5-PHENYL-, BUTYL ESTER, (2E,4E)-/CN
E8
              1
E9
              1
E10
              1
                    2,4-\text{HEXADIENOIC} ACID, 5-\text{PHENYL-}, ETHYL ESTER, (\text{E},\text{Z})-/\text{CN}
E11
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER/CN
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (2E,4E)-/CN
E12
=> e e1
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, ETHYL ESTER, (E,E)-/C
              1
Ε1
                    Ν
              1
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, ETHYL ESTER, (Z,E)-/C
E2
              1 --> 2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (2E,4E)
E3
                    -/CN
              1
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (E,E)-/
E4
E5
              1
                    2,4-HEXADIENOIC ACID, 5-METHYL-6-OXO-, METHYL ESTER, (Z,E)-/
E6
              1
                    2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER/CN
E.7
              1
                    2,4-HEXADIENOIC ACID, 5-NITRO-, METHYL ESTER, (E,E)-/CN
                    2,4-HEXADIENOIC ACID, 5-NITRO-8-QUINOLINYL ESTER/CN
E.8
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN
E.9
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (Z,E)-/CN
E10
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, BUTYL ESTER, (2E,4E)-/CN
E11
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, ETHYL ESTER, (E,Z)-/CN
E12
=> 2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-
MISSING OPERATOR '-PHENYL-, (E,E'
=> e 2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN/cn
                    2,4-HEXADIENOIC ACID, 5-NITRO-8-QUINOLINYL ESTER/CN
E1
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN
E2
              1
E3
              0 --> 2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-/CN/CN
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, (Z,E)-/CN
E4
             1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, BUTYL ESTER, (2E,4E)-/CN
E5
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, ETHYL ESTER, (E,Z)-/CN
E6
              1
E7
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER/CN
              1
                    2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (2E,4E)-/CN
```

E8

1

2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,?)-/CN F.9 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (E,E)-/CNE10 1 2,4-HEXADIENOIC ACID, 5-PHENYL-, METHYL ESTER, (Z,?)-/CN E11 1 E12 2,4-HEXADIENOIC ACID, 6,6,6-TRICHLORO-/CN 1 => e21 "2,4-HEXADIENOIC ACID, 5-PHENYL-, (E,E)-"/CN L3 => d 13L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN 28028-84-4 REGISTRY EDEntered STN: 16 Nov 1984 CN 2,4-Hexadienoic acid, 5-phenyl-, (E,E)- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Sorbic acid, 5-phenyl-, (E,E)- (8CI) CN FS STEREOSEARCH

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

Double bond geometry as shown.

$${\rm HO_2C}$$
 ${\rm E}$ ${\rm Ph}$ ${\rm Me}$

C12 H12 O2

MF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> logoff hold COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 12.67 36.35 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.60

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LOGINID: SSSPTA1623PAZ

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1
                Web Page for STN Seminar Schedule - N. America
NEWS 2 JAN 02
                STN pricing information for 2008 now available
NEWS 3 JAN 16
                CAS patent coverage enhanced to include exemplified
                prophetic substances
NEWS 4
        JAN 28
                USPATFULL, USPAT2, and USPATOLD enhanced with new
                custom IPC display formats
NEWS 5
        JAN 28
                MARPAT searching enhanced
NEWS 6
        JAN 28
                USGENE now provides USPTO sequence data within 3 days
                of publication
NEWS 7
        JAN 28
                TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9 FEB 08
                STN Express, Version 8.3, now available
NEWS 10 FEB 20
                PCI now available as a replacement to DPCI
NEWS 11 FEB 25
                IFIREF reloaded with enhancements
NEWS 12 FEB 25
                IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29
                WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                U.S. National Patent Classification
        MAR 31
                IFICDB, IFIPAT, and IFIUDB enhanced with new custom
NEWS 14
                IPC display formats
NEWS 15
        MAR 31
                CAS REGISTRY enhanced with additional experimental
                spectra
NEWS 16
        MAR 31
                CA/CAplus and CASREACT patent number format for U.S.
                applications updated
NEWS 17
        MAR 31
                LPCI now available as a replacement to LDPCI
        MAR 31
NEWS 18
                EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19
        APR 04
                STN AnaVist, Version 1, to be discontinued
NEWS 20
        APR 15
                WPIDS, WPINDEX, and WPIX enhanced with new
                predefined hit display formats
NEWS 21 APR 28 EMBASE Controlled Term thesaurus enhanced
NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                INPAFAMDB now available on STN for patent family
                searching
NEWS 24 MAY 30
                DGENE, PCTGEN, and USGENE enhanced with new homology
                sequence search option
NEWS 25
        JUN 06
                EPFULL enhanced with 260,000 English abstracts
NEWS 26
        JUN 06
                KOREAPAT updated with 41,000 documents
NEWS 27 JUN 13 USPATFULL and USPAT2 updated with 11-character
                patent numbers for U.S. applications
```

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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NEWS IPC8 For general information regarding STN implementation of IPC 8
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FILE 'HOME' ENTERED AT 14:51:35 ON 18 JUN 2008

=> file reg COST IN U.S. DOLLARS FULL ESTIMATED COST ENTRY SESSION 0.42 0.42

FILE 'REGISTRY' ENTERED AT 14:52:25 ON 18 JUN 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 17 JUN 2008 HIGHEST RN 1028750-52-8 DICTIONARY FILE UPDATES: 17 JUN 2008 HIGHEST RN 1028750-52-8

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http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e dehydrolipoic acid/cn
            1 DEHYDROLINALYL FORMATE/CN
F.1
               1
E2
                     DEHYDROLINDESTRENOLIDE/CN
F.3
              0 --> DEHYDROLIPOIC ACID/CN
             U --> DEHYDROLIPOIC ACID/CN
DEHYDROLIRINIDINE/CN
DEHYDROLIRIOFERINE/CN
DEHYDROLIRIOFERINE ACETATE/CN
DEHYDROLITHOCHOLIC ACID/CN
DEHYDROLOBINALINE/CN
DEHYDROLOGANIN/CN
DEHYDROLOLIOLIDE/CN
DEHYDROLONGISTBORINE/CN
E.4
E5
E6
E.7
Ε8
E9
E10
E11
E12
              1
                     DEHYDROLONGISTROBINE/CN
=> e lipoic acid/cn
E1
              1
                     LIPOHYDROPEROXIDASE/CN
                     LIPOIC ACETYLTRANSFERASE/CN
E.2.
               1
               2 --> LIPOIC ACID/CN
E3
                    LIPOIC ACID ACETYLTRANSFERASE/CN
              1
E4
              1
                     LIPOIC ACID CHLORIDE/CN
E5
              1
                     LIPOIC ACID DEHYDROGENASE/CN
Ε6
E7
              1
                      LIPOIC ACID DISULFONE/CN
              1
                      LIPOIC ACID FREE RADICAL/CN
Ε8
              1
Ε9
                      LIPOIC ACID METHYL ESTER/CN
              1
E10
                      LIPOIC ACID SYNTHASE/CN
               1
                      LIPOIC ACID SYNTHASE (ARABIDOPSIS THALIANA CLONE PRACE-5'/19
E11
                      3K14/PBLUE-3' GENE LIP1 PRECURSOR)/CN
E12
     1
                      LIPOIC ACID SYNTHASE (CAULOBACTER CRESCENTUS GENE CC1735)/CN
=> e3
               2 "LIPOIC ACID"/CN
L1
```

```
L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN
```

RN 57828-26-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN Lipoic acid (CA INDEX NAME)

MF Unspecified

CI COM, MAN

LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, CA, CAPLUS, CASREACT, CIN, PROMT, SCISEARCH, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

684 REFERENCES IN FILE CA (1907 TO DATE)

35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

684 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1200-22-2 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,2-Dithiolane-3-pentanoic acid, (3R)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithiolane-3-pentanoic acid, (R)-

CN = 1,2-Dithiolane-3-valeric acid, (+)-(8CI)

OTHER NAMES:

CN (R)-(+)- α -Lipoic acid

CN (R)- α -Lipoic acid

CN (R)-Lipoic acid

CN α -(+)-Lipoic acid

CN α -Lipoic acid

CN Byodinoral 300

CN d-Thioctic acid

CN Lipoec

CN Lipoic acid

CN = R-(+)-Thioctic acid

CN Thiogamma

CN Tiobec

CN Tiobec Retard

FS STEREOSEARCH

MF C8 H14 O2 S2

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIUDB, IMSDRUGNEWS, IMSRESEARCH, IPA, MRCK*, NAPRALERT, PROMT, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

$$S$$
 R CO_2H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

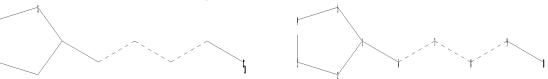
2239 REFERENCES IN FILE CA (1907 TO DATE)

98 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2250 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e 1,2-Dithiolane-3-pent-3-enoic acid /cn
                   1,2-DITHIOLANE-3-OCTANOIC ACID, 4-(ACETYLAMINO)PHENYL ESTER/
E1
             1
                   CN
                   1,2-DITHIOLANE-3-OCTANOIC ACID, 5-HEPTYL-, METHYL ESTER/CN
E2
             1
             0 --> 1,2-DITHIOLANE-3-PENT-3-ENOIC ACID/CN
E3
E4
             1
                   1,2-DITHIOLANE-3-PENTANAL/CN
E5
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE/CN
Ε6
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE, (±)-, POLYMER WITH 2-PROPEN
                   ENITRILE/CN
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE, (\pm)-, POLYMER WITH ETHENYL
Ε7
                   ACETATE/CN
                   1,2-DITHIOLANE-3-PENTANAMIDE, (±)-, POLYMER WITH METHYL 2
Ε8
             1
                   -PROPENOATE/CN
E9
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE, (3R)-/CN
                   1,2-DITHIOLANE-3-PENTANAMIDE, (3S)-/CN
E10
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE, (R)-/CN
E11
             1
                   1,2-DITHIOLANE-3-PENTANAMIDE, (R)-, MIXT. WITH 5-HYDROXY-2-(
E12
             1
                   HYDROXYMETHYL) -4H-PYRAN-4-ONE/CN
=>
```

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 lipoics.str



chain nodes :
6 7 8 9 10
ring nodes :
1 2 3 4 5
chain bonds :
1-6 6-7 7-8 8-9 9-10
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
1-2 1-5 2-3 3-4 4-5 6-7 7-8 8-9
exact bonds :
1-6 9-10

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

```
L2 STRUCTURE UPLOADED
```

=> d 12 L2 HAS NO ANSWERS L2 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 12 sss sam

SAMPLE SEARCH INITIATED 14:59:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 23 TO ITERATE

100.0% PROCESSED 23 ITERATIONS 13 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 173 TO 747 PROJECTED ANSWERS: 44 TO 476

L3 13 SEA SSS SAM L2

=> d scan

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-pentanoic acid, (R)-, compd. with α -phenylbenzenemethanamine (1:1) (9CI)

MF C13 H13 N . C8 H14 O2 S2

CM 1

Absolute stereochemistry. Rotation (+).

CM 2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):13

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN L-Cystine, (R)-1,2-dithiolane-3-pentanoate (9CI)

MF C8 \overline{H} 14 O2 S2 . x C6 H12 N2 O4 S2

Absolute stereochemistry. Rotation (+).

CM 2

Absolute stereochemistry.

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

MF C8 H14 O2 S2 . C3 H9 N O

CM 1

CM 2

Absolute stereochemistry. Rotation (-).

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-pentanoic acid, zinc salt, hydrate (2:1:2)

MF C8 H14 O2 S2 . H2 O . 1/2 Zn

● H₂O

●1/2 Zn

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt, mixt. with 1,2-dithiolane-3-pentanoic acid (9CI)

MF C9 H17 N O4 . C8 H14 O2 S2

CI MXS

CM 1

CM 2

$$_{\rm S}$$
 $_{\rm CH_2)}$ $_{\rm 4} _{\rm CO_2H}$

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-valeric acid, dimer, DL- (8CI)

MF (C8 H14 O2 S2)2

CI PMS

CM 1

$$S = (CH_2)_4 - CO_2H$$

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-pentanoic acid, 5-oxo-

MF C8 H12 O3 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- IN Vitamin B12, mixt. with 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methylthiazolium chloride, 1,2-dithiolane-3-pentanoic acid, riboflavin and vitamin B6 (9CI)
- MF C63 H88 Co N14 O14 P . C17 H20 N4 O6 . C12 H17 N4 O S . C8 H14 O2 S2 . C1 . Unspecified
- CI MXS

CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

$$_{\rm S}$$
 (CH₂)₄ $-$ CO₂H

CM 3

Absolute stereochemistry.

Ме

Me N Me
$$CH_2$$
 $+$ N CH_2 CH_2 CH_2 OH_2 OH_3 OH_4 $-$

● Cl-

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN L-Arginine, (3R)-1,2-dithiolane-3-pentanoate (9CI)

MF C8 H14 O2 S2 . x C6 H14 N4 O2

CM 1

Absolute stereochemistry. Rotation (+).

CM 2

Absolute stereochemistry.

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Adenosine, 5'-[[(3S)-3-amino-3-carboxypropyl]methylsulfonio]-5'-deoxy-, 1,3-propanedisulfonate (1:1) (salt), mixt. with 1,2-dithiolane-3-pentanoic acid (9CI)

MF C15 H23 N6 O5 S . C8 H14 O2 S2 . C3 H7 O6 S2

CI MXS

CM 1

$$S$$
 (CH₂)₄-CO₂H

CM 3

 $HO_3S-(CH_2)_3-SO_3-$

CM 4

Absolute stereochemistry.

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-pentanoic acid, magnesium salt (2:1)

MF C8 H14 O2 S2 . 1/2 Mg

CI COM

$$S$$
 (CH₂)₄-CO₂H

●1/2 Mg

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1-Propanaminium, 2-(acetyloxy)-3-carboxy-N,N,N-trimethyl-, inner salt, (2R)-, mixt. with (3R)-1,2-dithiolane-3-pentanoic acid

MF C9 H17 N O4 . C8 H14 O2 S2

CI MXS

CM 1

Absolute stereochemistry.

Absolute stereochemistry. Rotation (+).

L3 13 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1,2-Dithiolane-3-valeric acid, γ -methyl-, compd. with

1,1-diphenylmethylamine (7CI) MF C13 H13 N . C9 H16 O2 S2

CM 1

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{CH}_2-\text{CH}-\text{CH}_2-\text{CH}_2-\text{CO}_2\text{H} \end{array}$$

CM 2

ALL ANSWERS HAVE BEEN SCANNED

=> logogoff hold

0 LOGOGOFF

39 HOLD

L4 0 LOGOGOFF HOLD

(LOGOGOFF(W)HOLD)

=> logoff hold

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 25.43 25.85

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:00:25 ON 18 JUN 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JAN 02
                 STN pricing information for 2008 now available
NEWS 3
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
NEWS
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
                 custom IPC display formats
         JAN 28
                 MARPAT searching enhanced
NEWS
NEWS
         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
NEWS
         JAN 28
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS
      8
         JAN 28
                 MEDLINE and LMEDLINE reloaded with enhancements
     9
NEWS
         FEB 08
                 STN Express, Version 8.3, now available
NEWS 10 FEB 20
                 PCI now available as a replacement to DPCI
NEWS 11 FEB 25
                 IFIREF reloaded with enhancements
NEWS 12
         FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13
         FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
NEWS 14
         MAR 31
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                  IPC display formats
NEWS 15
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
                 spectra
NEWS 16
         MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
NEWS 17 MAR 31
                 LPCI now available as a replacement to LDPCI
NEWS 18 MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19
         APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15
                 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
NEWS 21 APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 22
         APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS 23 MAY 30
                 INPAFAMDB now available on STN for patent family
                 searching
NEWS 24
         MAY 30
                 DGENE, PCTGEN, and USGENE enhanced with new homology
                 sequence search option
NEWS 25
         JUN 06
                 EPFULL enhanced with 260,000 English abstracts
NEWS 26
         JUN 06
                 KOREAPAT updated with 41,000 documents
NEWS 27
         JUN 13
                 USPATFULL and USPAT2 updated with 11-character
                 patent numbers for U.S. applications
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
NEWS HOURS
               STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
              For general information regarding STN implementation of IPC 8
NEWS IPC8
Enter NEWS followed by the item number or name to see news on that
```

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Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * *

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 05:26:41 ON 19 JUN 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 18 JUN 2008 HIGHEST RN 1029146-45-9 DICTIONARY FILE UPDATES: 18 JUN 2008 HIGHEST RN 1029146-45-9

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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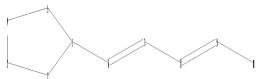
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 thioctic diene.str





chain nodes : 6 7 8 9 10 ring nodes : 1 2 3 4 5 chain bonds : 1-6 6-7 7-8 8-9 9 - 10ring bonds : 1-2 1-5 2-3 3 - 4exact/norm bonds : 1-2 1-5 2-3 3 - 44 - 5exact bonds : 1-6 6-7 7-8 8-9 9-10

Match level:

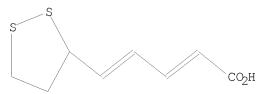
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l1 exact full

FULL SEARCH INITIATED 05:27:11 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 2 ANSWERS

SEARCH TIME: 00.00.01

L2 2 SEA EXA FUL L1

=> d scan 1-2

'1-2' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L2 2 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2,4-Pentadienoic acid, 5-(1,2-dithiolan-3-yl)-

MF C8 H10 O2 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN

FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used

SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties

EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO

STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 2 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2,4-Pentadienoic acid, 5-(1,2-dithiolan-3-yl)-, (E,E)- (9CI)

MF C8 H10 O2 S2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 60.77 60.98

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 05:27:57 ON 19 JUN 2008
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FILE COVERS 1907 - 19 Jun 2008 VOL 148 ISS 25 FILE LAST UPDATED: 18 Jun 2008 (20080618/ED)

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http://www.cas.org/legal/infopolicy.html

=> 12

L3 1 L2

=> d 13 ti fbib abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

TI 1,2-Dithiol-3-ylpropenoic acid and -pentadienoic acid derivatives

AN 1987:176369 CAPLUS

DN 106:176369

OREF 106:28629a,28632a

TI 1,2-Dithiol-3-ylpropenoic acid and -pentadienoic acid derivatives

IN Yamamoto, Itaru; Matsubara, Akira; Yamashita, Hiroyuki; Mizuno, Osamu; Sakaguchi, Mitsuhiro; Kumakura, Mikio

PA Mitsui Toatsu Chemicals, Inc., Japan

Ι

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 62022779	A	19870130	JP 1985-161158	19850723
	JP 05072389	В	19931012		
				JP 1985-161158	19850723

GI

AB The title compds. (I; n=1, 2; R=H, Me) and physiol. acceptable salts, useful as immunomodulators, are prepared Reaction of 4-formyl-2,2-dimethyl-1,3-dithiane with Ph3P:CHCO2Et in benzene followed by saponification and oxidation

with H2O2 in MeOH in the presence of Na2WO4 gave (E)-3-(2,2-dimethyl-1-oxo-1,3-dithian-4-yl) acrylic acid whose ring contraction in dioxane containing 6N H2SO4 at 95° gave 76% (E)-I (n=1,R=H). I in vitro were more effective as immunostimulants than lipoic aid in BALB/C mouse spleen cells stimulated by a T cell mitogen, concanavalin A.

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 5.31 66.29 SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.80-0.80

FILE 'REGISTRY' ENTERED AT 05:30:43 ON 19 JUN 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

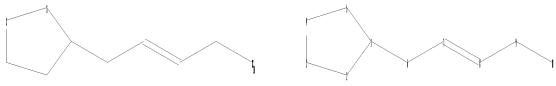
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 thictic alkene 1.str



chain nodes :
6 7 8 9 10
ring nodes :
1 2 3 4 5
chain bonds :
1-6 6-7 7-8 8-9 9-10

ring bonds:
1-2 1-5 2-3 3-4 4-5
exact/norm bonds:
1-2 1-5 2-3 3-4 4-5
exact bonds:
1-6 6-7 7-8 8-9 9-10

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L4 STRUCTURE UPLOADED

=> d 14 L4 HAS NO ANSWERS L4 STR



Structure attributes must be viewed using STN Express query preparation.

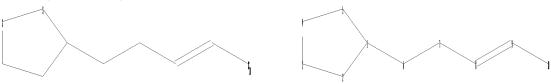
=> search 14 exact full FULL SEARCH INITIATED 05:31:23 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L5 0 SEA EXA FUL L4

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 2nd thictic alkene.str



chain nodes:
6 7 8 9 10
ring nodes:
1 2 3 4 5
chain bonds:
1-6 6-7 7-8 8-9 9-10
ring bonds:
1-2 1-5 2-3 3-4 4-5
exact/norm bonds:
1-2 1-5 2-3 3-4 4-5
exact bonds:

1-6 6-7 7-8 8-9 9-10

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 16 exact full
FULL SEARCH INITIATED 05:32:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L7 0 SEA EXA FUL L6

=> logoff hold

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
121.54
187.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

CA SUBSCRIBER PRICE

0.00 -0.80

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 05:33:07 ON 19 JUN 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 05:35:44 ON 19 JUN 2008 FILE 'REGISTRY' ENTERED AT 05:35:44 ON 19 JUN 2008 COPYRIGHT (C) 2008 American Chemical Society (ACS)

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
121.54

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

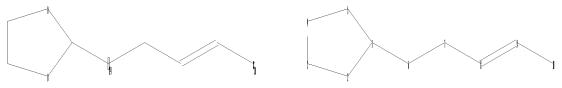
SINCE FILE TOTAL
ENTRY SESSION
SESSION

=>

 $\begin{tabular}{ll} Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files $$10025947\10025947dioxolaneneoic acid.str \end{tabular}$

-0.80

0.00



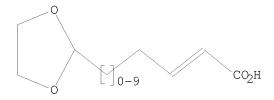
chain nodes : 6 7 8 9 10 ring nodes : 2 3 4 chain bonds : 1-6 6-7 7-8 8-9 9-10 ring bonds : 1 - 52-3 3 - 44 - 5exact/norm bonds : 1-2 1-5 2-3 4-5exact bonds : 1-6 6-7 7-8 8-9 9-10

CA SUBSCRIBER PRICE

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

L8 STRUCTURE UPLOADED

=> d 18 L8 HAS NO ANSWERS L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search 18 sss sam
SAMPLE SEARCH INITIATED 05:36:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 8 TO 329
PROJECTED ANSWERS: 0 TO 0

L9 0 SEA SSS SAM L8

=> search 18 sss full

FULL SEARCH INITIATED 05:36:34 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 180 TO ITERATE

100.0% PROCESSED 180 ITERATIONS 12 ANSWERS

SEARCH TIME: 00.00.01

L10 12 SEA SSS FUL L8

=> d scan

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Octenoic acid, 8-[2-(2,2-dimethylbutyl)-1,3-dioxolan-2-yl]-3,7,7-

trimethyl-

MF C20 H36 O4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):12

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Octenoic acid, 8-[2-(4-penteny1)-1,3-dioxolan-2-y1]-(9CI)

MF C16 H26 O4

$$O$$
 (CH₂)₃-CH=CH₂
(CH₂)₅-CH=CH-CO₂H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[2-(3-hydroxybutyl)-1,3-dioxolan-2-yl]-

MF C11 H18 O5

$$\begin{array}{c|c} \text{OH} & \text{OH} \\ \mid & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{CH}\text{--}\text{Me} \\ \hline \\ \text{O} & \text{CH}_2\text{--}\text{CH}\text{---}\text{CH}\text{---}\text{CO}_2\text{H} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Octenoic acid, 8-(2-methyl-1,3-dioxolan-2-yl)-MF C12 H20 O4

$$O$$
Me
(CH₂) 5-CH=CH-CO₂H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Heptenoic acid, 7-(1,3-dioxolan-2-yl)-2,6-dimethyl-MF C12 H20 O4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Pentanoic acid, 4-methyl-2-[2-(2-methyl-1,3-dioxolan-2-yl)ethylidene]MF C12 H20 O4

Me
$$CO_2H$$
 $CH_2-CH=C-Bu-i$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2,6-Decadienoic acid, 5-hydroxy-5,9-dimethyl-8-[2-(2-methyl-1,3-dioxolan-2-

yl)ethyl]-MF C18 H30 O5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Hexenoic acid, 5-hydroxy-6-(2-methyl-1,3-dioxolan-2-yl)-, (E)- (9CI)
MF C10 H16 O5

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Octenoic acid, 8-(2-methyl-1,3-dioxolan-2-yl)-, (E)- (9CI) MF C12 H20 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2,6-Nonadienoic acid, 9-(1,3-dioxolan-2-yl)-3-ethyl-7-methyl-, (Z,Z)(9CI)
MF C15 H24 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 12 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2,5-Hexadienoic acid, 4-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-6-[2-[(6S)-6-hydroxyheptyl]-1,3-dioxolan-2-yl]-, (2E,5Z)
MF C32 H44 O6 Si

Absolute stereochemistry. Double bond geometry as described by E or Z.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

$$\begin{array}{c} \text{Me} \\ | \\ \text{HO}_2\text{C}-\text{CH} = \begin{array}{c} \text{C}-\text{CH}_2 \\ \text{O} \end{array} \\ \begin{array}{c} \text{C} \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> e 2-Octenoic acid, 8-(2-methyl-1,3-dioxolan-2-yl)-/cn E1 2-OCTENOIC ACID, 8-(2-FORMYLPHENYL)-2-METHYL-, ETHYL ESTER/C

```
M
                   2-OCTENOIC ACID, 8-(2-FORMYLPHENYL)-2-METHYL-, ETHYL ESTER,
E_2
             1
                   (2E)-/CN
             1 --> 2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-/CN
E3
                   2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-, (E)-/CN
E4
                   2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-, ETHYL ESTE
E5
                   R, (E) - / CN
                   2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-, METHYL EST
Ε6
             1
                   ER/CN
                   2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-, METHYL EST
Ε7
             1
                   ER, (E) - / CN
                   2-OCTENOIC ACID, 8-(2-OXO-1(2H)-PYRIDINYL)-, ETHYL ESTER, (E
Ε8
                   ) -/CN
E9
             1
                   2-OCTENOIC ACID, 8-(2-PYRIDYL)-/CN
                   2-OCTENOIC ACID, 8-(2H-BENZOTRIAZOL-2-YL)-8-(4-MORPHOLINYL)-
E10
             1
                    , ETHYL ESTER, (E)-/CN
                   2-OCTENOIC ACID, 8-(2H-BENZOTRIAZOL-2-YL)-8-(BIS(PHENYLMETHY
             1
E11
                   L)AMINO)-, ETHYL ESTER, (E)-/CN
                   2-OCTENOIC ACID, 8-(3,3-DIMETHYLOXIRANYL)-3,6-DIMETHYL-, ETH
E12
             1
                   YL ESTER/CN
=> e3
L11
             1 "2-OCTENOIC ACID, 8-(2-METHYL-1,3-DIOXOLAN-2-YL)-"/CN
```

=> d 111

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

RN 96181-65-6 REGISTRY

ED Entered STN: 04 May 1985

CN 2-Octenoic acid, 8-(2-methyl-1,3-dioxolan-2-yl)- (CA INDEX NAME)

MF C12 H20 O4

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER (*File contains numerically searchable property data)

$$O$$
Me
(CH₂) 5-CH=CH-CO₂H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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95% HC.tplbond.CCH2CH(OH)(CH2)3CH:CHCO2Me (IV), b0.001, 105-8°,

NaCl-washed and dried extract evaporated, and the oil (136.0 g.) distilled

neutral

yielded

n20D 1.4860, v 3510, 3290, 2120, 1730, 1666, 986, 853 cm.-1 Zn dust (9.2 g., activated with iodine) stirred (N atmospheric) in 14 ml. 1:6 tetrahydrofuran-Et20 with addition of 14.4 g. HC.tplbond.CCH2Br and 15.8 g. III in 30 ml. 1:2 tetrahydrofuran-absolute Et20, the mixture stirred 15 min. with gentle heating, and the cooled mixture decomposed with saturated aqueous NH4Cl

and extracted with Et20 gave 18.9 g. material, distilled in a high vacuum to yield 58% IV, n20D 1.4862, ν 3510, 3280, 2115, 1950, 1729, 1663, 984, 852 cm.-1, containing a small amount of allene compound IV (81.3 g.) in 500 ml.

dioxane stirred (N atmospheric) under reflux with $1.5~\rm g.$ basic HgSO4 and boiled $10~\rm min.$ with dropwise addition of $100~\rm ml.$ 20% H2SO4, the cooled mixture saturated

with NaCl and extracted with ${\tt Et2O}$, the extract shaken with saturated aqueous NaCl and

the dried filtered extract evaporated, the residue (90.2 g.) chromatographed from

1:1 petr. ether-C6H6 on Al2O3 (activity II), and fractions 1-3 combined gave 67% AcCH:CH(CH2)3CH:CHCO2Me (V), b0.19 110-12°, n2OD 1.4857, v 1728, 1680, 1636, 1440, 980 cm.-1 III (50 g.) in 100 ml. pure Me2CO treated with 10 g. piperidine and 8 g. AcOH and the mixture refluxed (N atmospheric) 1 hr., excess Me2CO evaporated in vacuo, and the residue extracted with

Et20, the product (40 g.) chromatographed from 1:1 petr. ether-C6H6 on Al203, and the substance (31 g., b0.001 80-130°) fractionated gave 1.4 g. fraction, b0.001 111-15°, n20D 1.4818; 4.1 g. fraction, b0.001 115-19°, n20D 1.4866; 3.4 g. fraction, b0.001 119-30°, n20D 1.4908; and 1.1 g. fraction, b0.001 130-7°, n20D 1.4992. The 1st 3 fractions had bands at v 1720, 1678, 1629, 1430, and 980 cm.-1, practically identical with those of V. V (37.7 g., obtained by ketonization) in 130 ml. MeOH hydrogenated 10 hrs. with 0.8 g. 5% Pd-CaCO3 (poisoned with 1.6 mg. Pb(OAc)4 and prereduced in 30 ml. MeOH) and the product distilled yielded 80% Ac(CH2)5CH:CHCO2Me (VI), n20D 1.425, v 1720, 1708, 1658, 980 cm.-1 V (10.55 g., prepared by Knoevenagel condensation) in 30 ml. MeOH added to 0.3 g. prereduced Lindlar catalyst in 20 ml. MeOH and the mixture hydrogenated 7.33 hrs., filtered, and the residue on evaporation distilled in a bulb tube gave 10.5 g. VI, b0.001 $80-100^{\circ}$, n20D 1.4590. I (500 mg.) in 10 ml. absolute Et20 at 0° treated with titrated CH2N2 in Et2O, the mixture kept 30 min. before shaking with aqueous Na2CO3 and H2O, drying, and evaporating, and the oily residue

gave VI, b0.001 75-90°, n20D 1.4495. VI (30.4 g.) in 120 ml. dioxane autoclaved 1 hr. at 150° with 210 ml. 2N Na2CO3 and the mixture freed from dioxane in vacuo, diluted with H2O, and freed from 0.3 g. VI by extraction with Et2O, the aqueous phase saturated with NaCl and extracted with Et2O,

the oily product (24.5 g.) distilled at $115-55^{\circ}/0.001$ mm. and the crystalline product (10.5 g.) recrystd. at 0° from Et20-petr. ether gave I, Ac(CH2)5CH:CHCO2H, m. $51-3^{\circ}$, λ 214 m μ (ϵ 11,700). The mother liquor gave an oily acid, n20D 1.4675, which, chromatographed on silica gel and eluted with 4:1 C6H6-Et2O, gave cis-9-oxo-2-decenoic acid (cis-VII), b0.001 120-30°, n20D 1.4685, ν 3030, 2930, 2848, 2675, 1710, 1652, 1461, 1424, 1363, 1287, 1223, 1174, 1093, 1031, 994, 830, 721 cm.-1, together with 1, n20D 1.4700. (15.5 g.) in 200 ml. C6H6 refluxed 8 hrs. with 30 g. HOCH2CH2OH and 300 mg. p-MeC6H4SO3H under a Dean-Stark head and the product extracted with Et2O gave 18.3 g. VI ethylene ketal, b0.001 100-20°, n20D 1.4650, \mathbf{v} 1720, 1652, 1437, 1063, 1040, 980, 946, 719 cm.-1 VII (5g.) refluxed 1 hr. in 25 ml. 25% NaOH, the cooled mixture washed with Et20, and the aqueous phase acidified at 0° with HCl to pH 3 and extracted with Et20 gave 4 g. oily ethylene ketal (VIII) of VII, b0.001 115-35°, n20D 1.4748, ν 3100, 1705, 1652, 1420, 1063, 1043, 981, 946, 720 cm.-1 VIII (11.9 g.) in

150 ml. purest dioxane refluxed 30 min. with 12 ml. 2N HCl and the mixture freed from solvent, the residue taken up in Et2O, and the residue on evaporation distilled at $120-40^{\circ}/0.001$ ml. gave a colorless viscous oil, crystallized from Et2O-petr. ether to give 4.2 g. VII. I (4 g., m. 52-3°) treated at 0° in 60 ml. absolute C6H6 (N atmospheric) with 8 ml. SOC12 in 32 ml. petr. ether, the mixture heated gradually to room temperature

and

finally to boiling, treated dropwise with 1.6 ml. SOC12 in 12 ml. petr. ether, and the mixture refluxed 1 hr., the cooled mixture freed carefully from solvent in vacuo, and the residue distd; gave 2.9 g. yellow-green oily trans-MeCO(CH2)5CH:CHCOC1 (IX), b0.001 110-40°, n20D 1.4775, v 2925, 2840, 1790, 1760, 1709, 1622, 1462, 1415, 1358, 1296, 1279, 1160, 1118, 1097, 1052, 971, 917, 767, 748, 721, 679 cm.-1 Oily I (14.8 g., from queen substance mother liquors) in 220 ml. absolute C6H6 at 0° treated with 30 ml. SOC12 in 120 ml. petr. ether, the mixture kept 1 hr. at 50°, the solvent evaporated in vacuo, and the acid chloride (b0.001 110-25°, n20D 1.4779) stirred in 30 ml. dioxane with dropwise addition of 150 ml. 2N Na2CO3, the mixture stirred 6 hrs. at 20° and kept 16 hrs., the alkaline aqueous phase washed with Et2O and acidified with 2N HCl, saturated

with NaCl, and extracted with Et2O gave 12.6 g. acid, b0.001 110-40°, crystallized from Et2O-petr. ether at 0° to give 3.8 g. crystals, m. 39.5-41.5°, recrystd. 3 times to give a little I, m. 51-4°.

A noteworthy isomerization of cis- to trans-I was not established. 1 (11.04 g., m. 51°) in 80 ml. MeOH stirred at 20° with portionwise addition of 3.6 g. KBH4 and the mixture heated 30 min. on a steam bath, the residue on evaporation taken up in H2O and adjusted at 0° (ice bath) to pH 3 with 2N H2SO4, saturated with NaCl, and repeatedly extracted with Et2O gave 11.8 g. acid, n2OD 1.4737, distilled at 120-40°/0.001 ml. and the colorless oil, n2OD 1.4761, crystallized at 0° from Et2O-petr. ether gave waxy trans-9-hydroxy-2-decenoic acid, m. 43-5°, v 3080, 2945, 2680, 1715, 1655, 1465, 1423, 1365, 1315, 1295, 1220, 1175, 1110, 981, 938, 812, 723 cm.-1, identical with the royal jelly of Brown and Felauer (CA 55, 17916b).

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -0.80	TOTAL SESSION -1.60
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -0.80	TOTAL SESSION -1.60

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STRUCTURE FILE UPDATES: 18 JUN 2008 HIGHEST RN 1029146-45-9 DICTIONARY FILE UPDATES: 18 JUN 2008 HIGHEST RN 1029146-45-9

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=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 pneyl substituted enoic acid.str

```
April 1
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```
chain nodes :
2  3  4  5  6
ring nodes :
1  7  8  9  10  11
chain bonds :
1-2  2-3  3-4  4-5  5-6
ring bonds :
1-7  1-11  7-8  8-9  9-10  10-11
exact/norm bonds :
1-2  2-3
exact bonds :
3-4  4-5  5-6
normalized bonds :
1-7  1-11  7-8  8-9  9-10  10-11
```

G1:CH2,O,S,N

Match level:
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS

L13 STRUCTURE UPLOADED

=> d 113 L13 HAS NO ANSWERS L13 STR

G1 CH2, O, S, N

Structure attributes must be viewed using STN Express query preparation.

50 ANSWERS

=> search 113 sss sam
SAMPLE SEARCH INITIATED 05:57:20 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7483 TO ITERATE

26.7% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 144474 TO 154846
PROJECTED ANSWERS: 5153 TO 7267

L14 50 SEA SSS SAM L13

=> d scan

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[(4-bromo-2-chlorophenyl)amino]-4-oxoMF C10 H7 Br C1 N O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[(2-hydroxy-5-nitrophenyl)amino]-2-methyl-4-oxo-, (2Z)MF C11 H10 N2 O6

Double bond geometry as shown.

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-[[4-(difluoromethoxy)phenyl]amino]-4-oxo-MF C11 H9 F2 N O4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-oxo-4-[(3,7,8-trichlorodibenzo[b,e][1,4]dioxin-1-y1)amino]
MF C16 H8 C13 N O5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-[[3-(acetylamino)phenyl]amino]-4-oxo-MF C12 H12 N2 O4

$$\begin{array}{c|c} \mathsf{AcNH} & \mathsf{O} \\ \parallel \\ \mathsf{C-CH} = \mathsf{CH-CO_2H} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-oxo-4-[[2-[[(1-phenylethyl)amino]carbonyl]phenyl]amino]MF C19 H18 N2 O4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[4-[[2-[[2-chloro-5-(trifluoromethyl)phenyl]amino]-2-oxoethyl]thio]phenyl]amino]-4-oxo-

MF C19 H14 C1 F3 N2 O4 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[4-[(2S)-3-[(2-amino-2-oxoethyl)amino]-2-(methyl-2-propyn-1-ylamino)propyl]phenoxy]MF C19 H25 N3 O4

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN INDEX NAME NOT YET ASSIGNED MF C23 H19 C12 N3 O4 S2

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN INDEX NAME NOT YET ASSIGNED

MF C23 H19 C12 N3 O4 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Thieno[2,3-c]pyridine-6(5H)-carboxylic acid, 2-[[2-[[3-[(3-carboxy-1-oxo-2-propen-1-yl)amino]phenyl]thio]acetyl]amino]-3-cyano-4,7-dihydro-,
6-(1,1-dimethylethyl) ester

MF C25 H26 N4 O6 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN INDEX NAME NOT YET ASSIGNED

MF C23 H26 N2 O4 S

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN INDEX NAME NOT YET ASSIGNED MF C24 H25 N3 O4 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenedioic acid (2E)-, 2-methyl-3-[(2E,6E,10E)-3,7,11,15-tetramethyl-2,6,10,14-hexadecatetraenyl]-1,4-naphthalenediyl ester (9CI)

MF C39 H46 O8

CI COM

PAGE 1-A

PAGE 1-B

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-oxo-4-[[4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)oxy]phenyl]amino]-, (Z)- (9CI)

MF C18 H12 F13 N O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-oxo-4-(phenylamino)-, antimony(3+) salt (3:1), (Z)-(9CI)

MF C10 H9 N O3 . 1/3 Sb

Double bond geometry as shown.

●1/3 Sb(III)

Absolute stereochemistry. Double bond geometry as shown.

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-[4-[(3-carboxy-1-oxo-2-propen-1-yl)amino]benzoyl]-2-methylphenyl]amino]-4-oxo-

MF C22 H18 N2 O7

$$O HO_2C-CH=CH-C-NH$$
 $O HO_2C-CH=CH-C-NH$
 $O HO_2C-CH=CH-C-NH$
 $O HO_2C-CH=CH-C-NH$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L14 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[(3,4-dihydro-2H-1,5-benzodioxepin-7-yl)amino]-4-oxo-

MF C13 H13 N O5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

 $\begin{tabular}{ll} Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 pheyl substituted enoic acid.str \end{tabular}$

```
d<sub>p</sub>
```

chain nodes :



```
2 3 4 5 6
ring nodes :
1 7 8 9 10 11
chain bonds :
1-2 2-3 3-4 4-5 5-6
ring bonds :
1-7 1-11 7-8 8-9 9-10 10-11
exact/norm bonds :
1-2 2-3
exact bonds :
3-4 4-5 5-6
normalized bonds :
1-7 1-11 7-8 8-9 9-10 10-11
G1:CH2,O,S,N
Hydrogen count :
3:>= minimum 2
Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom
10:Atom 11:CLASS
```

L15 STRUCTURE UPLOADED

=> d 115 L15 HAS NO ANSWERS L15 STF

G1 CH2, O, S, N

Structure attributes must be viewed using STN Express query preparation.

=> search 115 sss sam
SAMPLE SEARCH INITIATED 06:00:58 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7483 TO ITERATE

26.7% PROCESSED 2000 ITERATIONS 4 ANSWERS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 144474 TO 154846

PROJECTED ANSWERS: 67 TO 531

PROJECTED ANSWERS: 67 TO

L16 4 SEA SSS SAM L15

=> d scan

L16 4 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[2'-ethoxy-3',5'-bis(1-methylethyl)[1,1'-biphenyl]-2-yl]amino]-3-methyl-, (2E)
MF C25 H33 N O3

Double bond geometry as shown.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L16 4 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(2S)-3-[(2-amino-2-oxoethyl)amino]-2-(methyl-2-propyn-1-ylamino)propyl]phenoxy]-

MF C19 H25 N3 O4

Absolute stereochemistry.

Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L16 4 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[(6-ethyl-1,2,3,4,5,6-hexahydro-3,11-dimethyl-2,6-methano-3-benzazocin-8-yl)oxy]-

MF C20 H27 N O3

CI COM

$$\begin{array}{c} \text{Et} \\ \text{O-CH}_2\text{-CH-CO}_2\text{H} \\ \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L16 4 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Maleic acid, (p-methylphenethyl) - (6CI) MF C13 H14 O4

Double bond geometry as shown.

ALL ANSWERS HAVE BEEN SCANNED

=> search 115 sss full FULL SEARCH INITIATED 06:02:26 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 149714 TO ITERATE

100.0% PROCESSED 149714 ITERATIONS SEARCH TIME: 00.00.01

404 ANSWERS

L17 404 SEA SSS FUL L15

=> d scan

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

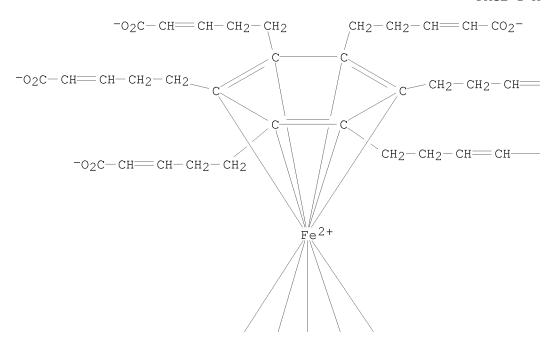
IN 2-Butenoic acid, 4-[[5-chloro-2-[1-(2,4-dichlorophenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-5-yl]phenyl]amino]
MF C26 H26 C13 N5 O3

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

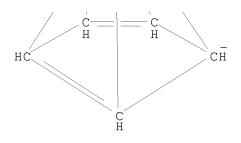
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Ferrate(5-), [[(2E,2'E,2''E,2'''E,2''''E,2''''E) 5,5',5'',5'',5'''',5'''''-(η6-1,2,3,4,5,6-benzenehexayl)hexakis[2 pentenoato]](6-)](η5-2,4-cyclopentadien-1-yl)- (9CI)
MF C41 H41 Fe O12
CI CCS, COM



PAGE 1-B

 $-co_2$



PAGE 2-A

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN ΙN

Benzeneacetic acid, 4-methoxy- α -[4-[4-[[tetrahydro-4-[(hydroxyamino)carbonyl]-2H-pyran-4-yl]sulfonyl]phenoxy]butylidene]-C25 H29 N O9 S

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-(2-bromophenoxy)-, (E)- (9CI) MF C10 H9 Br O3

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[1,2-dihydro-1-(3-methyl-2-butenyl)-2-oxo-4-phenyl-6-quinazolinyl]oxy]-2-methyl- (9CI)

MF C24 H24 N2 O4

$$\begin{array}{c} \text{CH}_2-\text{CH} = \text{CMe}_2 \\ \text{N} & \text{O} \\ \text{HO}_2\text{C}-\text{C} = \text{CH}-\text{CH}_2-\text{O} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(2,4-dichlorophenoxy)-

MF C10 H8 C12 O3

CI COM

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[1-(4-chloro-2-methoxyphenyl)-4-methyl-3[(1-piperidinylamino)carbonyl]-1H-pyrazol-5-yl]phenyl]amino]
MF C27 H29 C12 N5 O4

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 3-(2-phenylethyl)-, (2E)- MF C14 H18 O2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 2,3-dichloro-4-(methylphenylamino)-MF C11 H11 C12 N O2

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-phenoxy-, (Z)- (9CI) MF C10 H10 O3

Double bond geometry as shown.

$$\text{HO}_2\text{C} \qquad \overline{\text{Z}} \qquad \text{OPh}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 6-phenyl-, (2E)-MF C12 H14 O2

Double bond geometry as shown.

$$_{\mathrm{HO_{2}C}}$$
 $_{\mathrm{Ph}}$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 6-phenyl-MF C12 H14 O2

$$Ph-(CH_2)_3-CH=CH-CO_2H$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[1-(4-chloro-2-methylphenyl)-4-methyl-3[(1-piperidinylamino)carbonyl]-1H-pyrazol-5-yl]phenyl]amino]
MF C27 H29 C12 N5 O3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Hexenoic acid, 5-hydroxy-5-methyl-3-(2-phenylethyl)-, (2E)MF C15 H20 O3

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 6-phenyl-, (2Z)-MF C12 H14 O2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Pentenoic acid, 2-methyl-5-phenyl-, lithium salt (9CI) MF C12 H14 O2 . Li

● Li

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 3-phenyl-4-(phenylthio)-, (Z)- (9CI) MF C16 H14 O2 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[(6-ethyl-1,2,3,4,5,6-hexahydro-3,11-dimethyl-2,6-methano-3-benzazocin-8-yl)oxy]-, sodium salt (9CI)
MF C20 H27 N O3 . Na

$$\begin{array}{c} \text{Et} \\ \text{O-CH}_2\text{-CH-CO}_2\text{H} \\ \\ \text{Me} \end{array}$$

Na

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[2-[1-(4-chlorophenyl)-3-[(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]
MF C27 H29 C1 N4 O3

$$\begin{array}{c|c} \text{C1} & \text{O} \\ & \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2\text{-NH} & \text{Me} \\ \end{array}$$

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Butenoic acid, 4-[[(6aR,10aR)-6a,7,8,10a-tetrahydro-6,6,9-trimethyl-3-IN pentyl-6H-dibenzo[b,d]pyran-1-yl]oxy]-

MFC25 H34 O4

Absolute stereochemistry. Double bond geometry unknown.

$$HO_2C$$
 O $(CH_2)_4$ Me Me Me Me Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Pentenoic acid, 5-(4-cyanophenyl)-2-methyl-IN

C13 H13 N O2 MF

COM CI

$$\begin{array}{c} \text{Me} \\ | \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{CH} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Pentenoic acid, 5-(4-cyanophenyl)-2-methyl-, lithium salt (9CI)
MF C13 H13 N O2 . Li

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{CH} \\ \end{array}$$

● Li

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 4-Thiazoleacetic acid, 2-[[(1,1-dimethylethoxy)carbonyl]amino]- α -(3-phenylpropylidene)-, (Z)- (9CI) MF C19 H22 N2 O4 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 3-methyl-4-(phenylsulfonyl)-, (E)- (9CI) MF C11 H12 O4 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[[2-[3-[(cyclohexylamino)carbonyl]-1-(2,4-dichlorophenyl)-4-methyl-1H-pyrazol-5-yl]phenyl]amino]MF C27 H28 C12 N4 O3

$$\begin{array}{c|c} \text{C1} & \text{C1} & \text{O} \\ \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2\text{-NH} & \text{Me} \\ \end{array}$$

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-phenoxy-, (2E)-, compd. with phenylmethyl carbamimidothioate (1:1)

MF C10 H10 O3 . C8 H10 N2 S

CM 1

Double bond geometry as shown.

CM 2

$$\begin{array}{c} \text{NH} \\ || \\ \text{H}_2 \text{N-C-S-CH}_2 \text{-Ph} \end{array}$$

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 2-methyl-4-[(7-oxo-7H-furo[3,2-g][1]benzopyran-9-yl)oxy]-, (2Z)-

MF C16 H12 O6

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Pentenoic acid, 2-methyl-5-(4-nitrophenyl)-, lithium salt (9CI) MF C12 H13 N O4 . Li

$$CH_2-CH_2-CH = C-CO_2H$$

● Li

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Heptenoic acid, 2-[[(2,2-dimethylcyclopropyl)carbonyl]amino]-7(phenylthio)-, (Z)- (9CI)

MF C19 H25 N O3 S

Double bond geometry as shown.

Me NH NH
$$(CH_2)_4$$
 SPh

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 4,6-Heptadienoic acid, 5-methyl-2-[1-methyl-2-(phenylsulfonyl)ethylidene]7-(2,6,6-trimethyl-1-cyclohexen-1-yl)-, (Z,E,E)- (9CI)

MF C26 H34 O4 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN ΙN

2-Butenoic acid, 4-[[2-[1-(4-chloro-2-methoxyphenyl)-3-

[(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]-

MF C28 H31 C1 N4 O4

$$\begin{array}{c|c} \text{C1} & \text{OMe} & \text{O} \\ \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2 - \text{NH} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Butenedioic acid, 2-(2-phenylethyl)-3-(phenylmethyl)-, (2E)-ΙN

MFC19 H18 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

ΙN 2-Butenoic acid, 4-[methyl[4-[(3-quinolinylamino)carbonyl]phenyl]amino]-

C21 H19 N3 O3 MF

$$\begin{array}{c|c} \text{Me} & \\ & \text{N-CH}_2\text{-CH-CO}_2\text{H} \\ \\ & \text{NH-C} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

REGISTRY COPYRIGHT 2008 ACS on STN L17 404 ANSWERS

ΙN 2-Pentenoic acid, 2-cyano-5-(4-methoxyphenyl)-, (E)- (9CI)

MF C13 H13 N O3 Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Crotonic acid, 3-methyl-4-(p-tolyloxy)- (7CI) MF C12 H14 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 6-(4-methoxyphenyl)- MF C13 H16 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[2-[1-(4-chloro-2-methylphenyl)-3[(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]
MF C28 H31 C1 N4 O3

$$\begin{array}{c|c} \text{C1} & \text{Me} & \text{O} \\ & \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} & \text{CH-CH}_2\text{-NH} & \text{Me} \\ \end{array}$$

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Pentenoic acid, 5-[4-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methyl]phenyl]-, (2E)MF C17 H18 N2 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[[3-(aminoiminomethyl)phenyl][2-[4-(aminoiminomethyl)phenyl]ethyl]amino]-

MF C20 H23 N5 O2

CI COM

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-[(4-methylphenyl)sulfonyl]-, (E)- (9CI) MF C11 H12 O4 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenedioic acid, 2-[[[4-[[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]amino]phenyl]thio]methyl]-, (Z)- (9CI)

MF C21 H22 N2 O7 S

Double bond geometry as shown.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Butenoic acid, 4-(4-tricyclo[3.3.1.13,7]dec-1-ylphenoxy)-ΙN

MFC20 H24 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Butenoic acid, 4-[[5-chloro-2-[1-(4-chlorophenyl)-3-ΙN [(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]-

C27 H28 C12 N4 O3 MF

$$\begin{array}{c|c} \text{C1} & \text{O} & \text{O} \\ \text{N} & \text{C-NH} \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2\text{-NH} & \text{Me} \\ \end{array}$$

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Propanedioic acid, 2-[1-amino-2-[3-(trifluoromethyl)phenoxy]ethylidene]MF C12 H10 F3 N O5

$$\begin{array}{c|c} & \text{HO}_2\text{C} & \text{NH}_2 \\ & & & \\ & \text{HO}_2\text{C} - \text{C} = \text{C} - \text{CH}_2 - \text{O} \end{array}$$
 CF3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Octenoic acid, 8-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl), (Z)- (9CI)

MF C22 H32 O2

Double bond geometry as shown.

Me Me (CH₂) 5
$$\overline{Z}$$
Me Me

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Crotonic acid, 3-methyl-4-(2,6-xylyloxy)- (7CI) MF C13 H16 O3

$$\begin{array}{c|c} \text{Me} \\ \hline \text{O-CH}_2\text{-C} \longrightarrow \text{CH-CO}_2\text{H} \\ \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(2,4-dichlorophenoxy)-, compd. with N-methylmethanamine (1:1), mixt. with 3-(1-methylethyl)-1H-2,1,3-benzothiadiazin-4(3H)-one 2,2-dioxide compd. with N-methylmethanamine (1:1) (9CI)

MF C10 H12 N2 O3 S . C10 H8 C12 O3 . C2 H7 N . C2 H7 N

CI MXS

CM 1

CM 2

CM 3

H3C-NH-CH3

CM 4

CM6

H3C-NH-СН3

L17

404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN 2-Butenoic acid, 4-[[5-chloro-2-[3-[(cyclohexylamino)carbonyl]-1-(2,4-ΙN dichlorophenyl)-4-methyl-1H-pyrazol-5-yl]phenyl]amino]-

C27 H27 C13 N4 O3 MF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

REGISTRY COPYRIGHT 2008 ACS on STN L17 404 ANSWERS ΙN 2-Pentenoic acid, 5-(2-iodophenoxy)-, (2E)-MF C11 H11 I O3

Double bond geometry as shown.

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Propanedioic acid, 2-[1-[[(4-methylphenyl)sulfonyl]amino]-2-[3-

(trifluoromethyl)phenoxy]ethylidene]-

MF C19 H16 F3 N O7 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Pentenoic acid, 5-(4-cyanophenyl)-, (E)- (9CI)

MF C12 H11 N O2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Undecenoic acid, 11-(1,3-benzodioxol-5-yl)-, (E)- (9CI)

MF C18 H24 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(2,4-dichlorophenoxy)-, compd. with N-methylmethanamine (1:1), mixt. with N'-(3-chloro-4-methoxyphenyl)-N-methoxy-N-methylurea

(9CI)
MF C10 H13 C1 N2 O3 . C10 H8 C12 O3 . C2 H7 N
CI MXS

CM 1

CM 2

CM 3

CM 4

H3C-NH-CH3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[1-(4-chloro-2-methoxyphenyl)-3[(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]
MF C28 H30 C12 N4 O4

$$\begin{array}{c|c} \text{C1} & \text{OMe} & \text{O} \\ & \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2 - \text{NH} \\ & \text{Me} \\ \\ & \text{C1} \end{array}$$

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[2-bromo-4-(3-cyano-1,4,5,6,7,8-hexahydro-2-methyl-5-oxo-7-propyl-4-quinolinyl)-6-ethoxyphenoxy]-

MF C26 H29 Br N2 O5

$$\begin{array}{c|c} n-\text{Pr} & \overset{H}{N} & \text{Me} \\ \hline & O & \\ \hline & \text{CN} \\ \hline & \text{EtO} & \\ & \text{Br} \\ \hline & \text{HO}_2\text{C}-\text{CH} \\ \hline & \text{CH}-\text{CH}_2-\text{O} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Propanedioic acid, 2-[1-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-[3-(trifluoromethyl)phenoxy]ethylidene]-

MF C20 H12 F3 N O7

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 4-[(2-iodophenyl)(phenylmethyl)amino]-MF C17 H16 I N O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

2-Butenedioic acid, 2-[[[4-[[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]amino]phenyl]thio]methyl]-, (E)- (9CI)

MF C21 H22 N2 O7 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 6-[3-(4-chlorobenzoy1)-2-methylphenyl]-MF C20 H19 C1 O3

$$C1$$
 $CH_2)_3-CH$ $CH-CO_2H$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[1-(4-chloro-2-methylphenyl)-3[(cyclohexylamino)carbonyl]-4-methyl-1H-pyrazol-5-yl]phenyl]amino]
MF C28 H30 C12 N4 O3

$$\begin{array}{c|c} \text{C1} & \text{Me} & \text{O} \\ & \text{N} & \text{C-NH} \\ \\ \text{HO}_2\text{C-CH} = \text{CH-CH}_2 - \text{NH} & \text{Me} \\ \\ & \text{C1} \end{array}$$

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[4-[(2R)-2-(2-butyn-1-ylmethylamino)propyl]phenoxy]-

Absolute stereochemistry.

Double bond geometry unknown.

C18 H23 N O3

MF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Propanedioic acid, 2-[2-(4-fluorophenoxy)-1-[[[(4-methoxyphenyl)methoxy]carbonyl]amino]ethylidene]-MF C20 H18 F N O8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Nonenoic acid, 9-(1,3-benzodioxol-5-yl)-, (E)- (9CI) MF C16 H20 O4

Double bond geometry as shown.

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 5-oxo-3-phenethyl- (6CI) MF C14 H16 O3

$$\begin{array}{c|c} \operatorname{HO_2C-CH} & \operatorname{O} \\ \parallel & \parallel \\ \operatorname{Ph-CH_2-CH_2-C-CH_2-C-Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Heptenoic acid, 3-methoxy-7-phenyl-MF C14 H18 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[[2-[5-(4-chlorophenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]MF C26 H28 Cl N5 O3

Absolute stereochemistry.

Double bond geometry unknown.

$$_{
m HO_2C}$$
 O Me $_{
m Me}$ C $_{
m C}$ Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 3-iodo-4-(methylphenylamino)-, (Z)- (9CI)

MF C11 H12 I N O2

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Hexenoic acid, 2-cyano-3-phenethyl- (6CI) MF C15 H17 N O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Heptenoic acid, 3-methoxy-7-(3,4,5-trimethoxyphenyl)-MF C17 H24 O6

OMe OMe OMe
$$(CH_2)_4-C$$
 $CH-CO_2H$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[[2-[5-(2,4-dichlorophenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]MF C26 H27 C12 N5 O3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[4-[(2S)-2-(2-butyn-1-ylmethylamino)-3-methoxypropyl]phenoxy]MF C19 H25 N O4

Absolute stereochemistry.

Double bond geometry unknown.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \text{HO}_2\text{C} & & \\ & & & \\ \end{array} \begin{array}{c} \text{OMe} \\ & \text{N} \\ & \text{C} \\ \hline \end{array} \begin{array}{c} \text{C} \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Propanedioic acid, 2-[2-(4-fluorophenoxy)-1-[[[2-(trimethylsilyl)ethoxy]carbonyl]amino]ethylidene]-MF C17 H22 F N O7 Si

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Heptenoic acid, 7-phenyl-

Ph- (CH₂)₄-CH=CH-CO₂H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Butenoic acid, 3-(2-furany1)-4-phenoxy-, (E)- (9CI) MF C14 H12 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Benzeneacetic acid, 2-carboxy- α -(1-methyl-3-phenylpropylidene)-, (Z)- (9CI) MF C19 H18 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[2-[5-(4-chloro-2-methoxyphenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]
MF C27 H30 Cl N5 O4

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(2S)-2-(2-butyn-1-ylmethylamino)-3-(2-propen-1-yloxy)propyl]phenoxy]-

MF C21 H27 N O4

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Propanedioic acid, 2-[2-(4-fluorophenoxy)-1-[[(2-nitrophenyl)thio]amino]ethylidene]MF C17 H13 F N2 O7 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Heptenoic acid, 3-[(3,4-dimethoxyphenyl)thio]-7-phenyl-, (E)- (9CI)

MF C21 H24 O4 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Pentenoic acid, 3-[(phenylthio)methyl]-, (E)-(9CI) MF C12 H14 O2 S

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Butanedioic acid, (1-methyl-3-phenylpropylidene)-, (E)- (9CI)
MF C14 H16 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[2-[5-(4-chloro-2-methylphenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]
MF C27 H30 C1 N5 O3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(2S)-2-(2-butyn-1-ylmethylamino)-3-(phenylmethoxy)propyl]phenoxy]-

MF C25 H29 N O4

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN Propanedioic acid, 2-[1-[[(1-[1,1'-biphenyl]-4-yl-1methylethoxy)carbonyl]amino]-2-(4-fluorophenoxy)ethylidene]MF C27 H24 F N O7

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN 2-Heptenoic acid, 3-(3,4-dimethoxyphenyl)-7-phenyl-MF C21 H24 O4

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN IN Maleic acid, (p-methylphenethyl)- (6CI) MF C13 H14 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Pentenoic acid, 5-(6-methoxy-1,3-benzodioxol-5-yl)-, (E)- (9CI)
MF C13 H14 O5

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[5-(4-chlorophenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]
MF C26 H27 C12 N5 O3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(2S)-3-(2-amino-2-oxoethoxy)-2-(2-butyn-1-ylmethylamino)propyl]phenoxy]-

MF C20 H26 N2 O5

Absolute stereochemistry. Double bond geometry unknown.

$$\begin{array}{c|c} S & O & NH_2 \\ \hline \\ HO_2C & O & Me \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzoic acid, 4-(4-carboxy-3-penten-1-yl)-, 1-methyl ester

MF C14 H16 O4

CI COM

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{CH} \\ \hline \\ \text{C}\text{--}\text{CO}_2\text{H} \\ \\ \text{MeO--}\text{C} \\ \\ | \\ \text{O} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Heptenoic acid, 2-methyl-7-phenyl-, (E)- (9CI)

MF C14 H18 O2

Double bond geometry as shown.

$$^{\mathrm{Me}}$$
 $^{\mathrm{E}}$ $^{\mathrm{CH}_2)}$ $^{\mathrm{Ph}}$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]-3-hydroxy-

MF C15 H11 C1 F N O5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(4-chlorophenoxy)-, sodium salt (9CI)

MF C10 H9 Cl O3 . Na

Na

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[[5-chloro-2-[5-(2,4-dichlorophenyl)-4-methyl-3-[(1-piperidinylamino)carbonyl]-1H-pyrazol-1-yl]phenyl]amino]-

MF C26 H26 C13 N5 O3

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-[4-[(2S)-2-(2-butyn-1-ylmethylamino)-3-(dimethylamino)propyl]phenoxy]-

MF C20 H28 N2 O3

Absolute stereochemistry.

Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(2-naphthalenyloxy)-, (2E)-

MF C14 H12 O3

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2-Butenoic acid, 4-(4-methoxyphenoxy)-2-methyl-, (E)- (9CI)

MF C12 H14 O4

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 404 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
IN 2-Butenoic acid, 4-[4-[(3-fluoro-5-iodo-2-pyridinyl)oxy]phenoxy]-3-hydroxyMF C15 H11 F I N O5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> save temp 117 erset/a
ANSWER SET L17 HAS BEEN SAVED AS 'ERSET/A'

=> e 2-Hexer	noic ac	id, 6-(4-methoxyphenyl)-/cn
E1		2-HEXENOIC ACID, 6-(4-HYDROXY-4-METHYL-2-OXOCYCLOHEXYL)-, ME
		THYL ESTER, $(1R-(1A(E),4A))-/CN$
E2	1	2-HEXENOIC ACID, 6-(4-HYDROXY-4-METHYL-2-OXOCYCLOHEXYL)-, ME
		THYL ESTER, $(1R-(1A(E), 4B))-/CN$
E3	1>	2-HEXENOIC ACID, 6-(4-METHOXYPHENYL)-/CN
E4	1	2-HEXENOIC ACID, 6-(4-METHOXYPHENYL)-, ETHYL ESTER/CN
E5	1	2-HEXENOIC ACID, 6-(4-METHOXYPHENYL)-, ETHYL ESTER, (2E)-/CN
E6	1	2-HEXENOIC ACID, 6-(4-METHOXYPHENYL)-4,4-BIS(METHYLTHIO)-, E
		THYL ESTER, (E)-/CN
E7	1	2-HEXENOIC ACID, 6-(4-METHOXYPHENYL)-4-OXO-, ETHYL ESTER, (E
) -/CN
E8	1	,
		E) -/CN
E9	1	2-HEXENOIC ACID, 6-(4-METHYL-1-PIPERIDINYL)-5-((2-NAPHTHALEN
		YLSULFONYL)AMINO)-6-OXO-, METHYL ESTER, (S)-/CN
E10	1	2-HEXENOIC ACID, 6-(4-METHYL-2-OXO-3-CYCLOHEXEN-1-YL)-, METH
		YL ESTER, (R-(E))-/CN
E11	1	2-HEXENOIC ACID, 6-(4-METHYL-2-OXO-3-CYCLOHEXEN-1-YL)-, METH
		YL ESTER, $(R-(Z))-/CN$
E12	1	2-HEXENOIC ACID, 6-(4-METHYL-5-OXO-3-CYCLOHEXEN-1-YL)-, METH
		YL ESTER, (E)-/CN
. 2		
=> e3	1 110	UDVENOTO ACTO (/ A MERICOVIDIENTI) II /ON
L18	1 "2-	HEXENOIC ACID, 6-(4-METHOXYPHENYL)-"/CN

=> d 118

L18 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

RN 52244-71-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2-Hexenoic acid, 6-(4-methoxyphenyl)- (CA INDEX NAME)

OTHER NAMES:

CN 6-(p-Methoxyphenyl)-2-hexenoic acid

MF C13 H16 O3

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> 118

L19 1 L18

=> d l19 ti fbib abs

L19 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

- TI 1,5-Hydride shifts in acyclic systems containing α,β -unsaturated ketones and p-methoxyphenyl groups
- AN 1974:145604 CAPLUS
- DN 80:145604
- OREF 80:23497a,23500a
- TI 1,5-Hydride shifts in acyclic systems containing α,β -unsaturated ketones and p-methoxyphenyl groups
- AU Atkinson, Robert S.; Green, Richard H.
- CS Dep. Chem., Univ. Leicester, Leicester, UK
- SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1974), (3), 394-401 CODEN: JCPRB4; ISSN: 0300-922X
- DT Journal
- LA English
- D-labeling showed that the acid-catalyzed rearrangement of p-HOC6H4(CH2)2CR2CH2CH:CHCOMe (I, R = H) to 2-(p-hydroxyphenyl)cyclohexyl Me ketone involved an intramol. H shift. A similar rearrangement was observed for I (R = Me) and its aromatic Me ether but not analogous products were obtained from p-MeOC6H4CHR(CH2)2CH:CHCOMe (R = H, p-MeOC6H4) under the same reaction conditions.

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 588.09 5.31 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.80-2.40

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http://www.cas.org/support/stngen/stndoc/properties.html

```
1 2-HEPTENOIC ACID, 3-METHOXY-7-PHENYL-, (E)-/CN
E.4
            1
                  2-HEPTENOIC ACID, 3-METHYL-/CN
E.5
E6
            1
                  2-HEPTENOIC ACID, 3-METHYL-, (2E)-/CN
E.7
            1
                  2-HEPTENOIC ACID, 3-METHYL-, (2Z)-/CN
E.8
                 2-HEPTENOIC ACID, 3-METHYL-, (2Z)-, MIXT. WITH (3Z)-3-METHYL
            1
                  -3-HEPTENOIC ACID/CN
E9
            1
                  2-HEPTENOIC ACID, 3-METHYL-, (E)-/CN
                  2-HEPTENOIC ACID, 3-METHYL-, (E)-, COMPD. WITH N-CYCLOHEXYLC
E10
            1
                  YCLOHEXANAMINE (1:1)/CN
             1
                  2-HEPTENOIC ACID, 3-METHYL-, (E)-, MIXT. WITH 3-METHYLENEHEP
E11
                  TANOIC ACID, (E)-3-METHYL-3-HEPTENOIC ACID, (Z)-3-METHYL-2-H
                  EPTENOIC ACID AND (Z)-3-METHYL-3-HEPTENOIC ACID/CN
E12
                  2-HEPTENOIC ACID, 3-METHYL-, (Z)-/CN
=> e3
            1 "2-HEPTENOIC ACID, 3-METHOXY-7-PHENYL-"/CN
L20
=> d 120
L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 7.61 595.70 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -2.400.00

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=> 120

L21 3 L20

=> d 121 1-3 ti

L21 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN TI Synthesis of kavain, dihydrokavain, and analogs

L21 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

TI Constituents of kawa root. X. Kawain and dihydrokawain

L21 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

TI Constituents of the kawa root, VIII. Kawaic acid

=> d 121 1-3 ti fbib abs

L21 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

TI Synthesis of kavain, dihydrokavain, and analogs

AN 1977:5263 CAPLUS

DN 86:5263

OREF 86:907a,910a

TI Synthesis of kavain, dihydrokavain, and analogs

AU Israili, Z. H.; Smissman, E. E.

CS Sch. Pharm., Univ. Kansas, Lawrence, KS, USA

SO Journal of Organic Chemistry (1976), 41(26), 4070-4

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

GI

AB Kavain (I), dihydrokavain (II), and a number of new analogues of kava pyrones were prepared Kavain and dihydrokavain were synthesized by a modification of the Reformatskii reaction in yields severalfold higher than described before. Several new analogues of the naturally occurring kava pyrones were synthesized in 10-60% yields by condensing the appropriate aldehyde with 4-methoxy-6-methyl-2-pyrone. The pyrones dehydrokavain and yangonin were obtained in much improved yields. Catalytic hydrogenation of pyrones gave new analogues of dihydrokavain.

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L21 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
```

- TI Constituents of kawa root. X. Kawain and dihydrokawain
- AN 1931:8664 CAPLUS
- DN 25:8664
- OREF 25:937f-i,938a-b
- TI Constituents of kawa root. X. Kawain and dihydrokawain
- AU Borsche, W.; Peitzsch, W.
- SO Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1930), 63B, 2414-7 CODEN: BDCBAD; ISSN: 0365-9488
- DT Journal
- LA Unavailable
- GI For diagram(s), see printed CA Issue.
- AΒ cf. C. A. 24, 1099-1100. It was shown in Paper VIII that kawaic acid (I) is the CH2O2-free mother substance of methysticinic acid, CH2O2C6H3CH:CHCH:CHC(OMe):CHCO2H, and it was concluded that kawa root also probably contains, in addition to methysticin, C15H14O5, the doubly unsatd. lactone kawain (II). Considerable difficulties were at first met in attempts to isolate it, but this was finally effected. Pure II is a beautifully crystallized substance, optically active like methysticin and extraordinarily similar to it in its chemical behavior. Hot NaOH smoothly converts it into I and catalytic hydrogenation gives a mixture of much dihydrokawain (III) and a little tetrahydrokawaic acid, PhCH2CH2CH2CH2C(OMe):CHCO2H (IV). III was also found (with J. Niemann) in kawa resin. Alkali isomerizes it to dihydrokawaic acid, PhCH2CH2CH:CHC(OMe):CHCO2H (V). Com. kawa resin in 250-g. portions is dissolved in 2 1. Et20, filtered, the Et20 shaken out 3 times with 3% NaOH, washed to neutrality with cold saturated NaCl, turbined several hrs. with Na2SO4 and evaporated, giving about 225 g. of residue. This is then extracted 10 hrs. daily for 6-7 days with petroleum-hexane in a continuous extractor, the extractive which seps. in the boiling flask being separately rinsed out every morning with Et20. When the combined Et20 solns. are evaporated the residue begins to crystallize, especially if seeded with II and stirred. After several weeks the crystals are washed with Et20 until the residue is colorless. Most of the II is present in the exts. of the 2nd-4th days and is obtained almost pure after 1 crystallization

MeOH-Et2O. The total yield of II is about 25% of the purified resin. It is purified by distilling (195-7° under 0.1 mm.) and crystallizing from MeOHEt2O. It begins to sinter 102°, m. 105-6°, is soluble in concentrated H2SO4 with red color, [α]D2O 105° (1% solution in absolute alc.). III (3 g. from 4.6 g. II), m. 56-8°, soluble in H2SO4 without color, [α]D2O 30° (1% solution in absolute alc.). V, m. 139-40° (gas evolution). As III is more soluble than II, it is found in the Et2O filtrates from the crude II obtained in the 2nd-4th day exts. of the resin. It seps. in yellowish crystalline aggregates, m. 50-4°, of a III-II mixture or "pseudokawain."

- L21 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Constituents of the kawa root. VIII. Kawaic acid
- AN 1929:24992 CAPLUS
- DN 23:24992
- OREF 23:2965h-i,2966a-c
- TI Constituents of the kawa root. VIII. Kawaic acid
- AU Borsche, W.; Peitsch, W.
- CS Univ. Frankfurt a. M
- SO Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1929), 62B, 368-73 CODEN: BDCBAD; ISSN: 0365-9488
- DT Journal
- LA Unavailable

- GI For diagram(s), see printed CA Issue.
- The product C13H12O3, m. $164-5^{\circ}$, and designated as kawaic acid (I), which B, and Roth obtained from crude kawa resin, was not pure but admixed with nearly related acids, the separation of which has finally been effected only after many unsuccessful attempts. The pure I m. $185-6^{\circ}$ and has the composition C14H24O3; it is evidently the CH2O2-free mother substance of methysticinic acid (II), i. e., γ -cinnamol- β -methoxycrotonic acid. Its Me ester on partial saponification with alc. HCl gives the same PhCH:CHCOCH2CO2Me as is obtained by deacetylation of PhCH:CHCH:CHCOCHAcCO2Me. On catalytic reduction with colloidal Pd, I behaves just like II, taking up at first only 2 mols. H2 and giving tetrahydrokawaic acid (III), which on distillation in vacuo smoothly yields 6-phenyl-2-methoxy- Δ 1-hexene (IV), with acids is decomposed into MeOH, CO2 and 6-phenyl-2-hexanone and on further shaking with H2 and Pd is only very slowly reduced to hexahydrokawaic acid. III has been synthesized by treating PhCH2CH2CH2CH2COCH2CO2Me with a large excess of CH2N2 and saponifying the alkali-insol. part of the product with NaOH. A similar synthesis of I has not yet been effected because the double bonds in PhCH:-CHCH:CHCOCH2CO2Me react too easily with CH2N2 to form stable addition products containing N. I is obtained by B. and R.'s method from the kawa resin under exactly the same conditions as II from methysticin and it is, therefore, quite possible that I also does not exist in the resin as such but as a doubly unsatd. lactone, kawain, PhCH:- CHCH.CH2.C(OMe):CH.CO.O. I seps. from Et20 in yellow, elongated, 6-cornered tablets, soluble in concentrated

H2SO4 with purple color, gives in MeOH with FeCl3 a faint brown color only after several hrs.; heated at 190° until the evolution of CO2 ceases, it yields a brown, glassy resin whose MeO content corresponds approx. to 6-phenyl-2-methoxy- Δ 1,3,6-hexatriene but which decomps. on attempted distillation under 14 mm. In N H2SO4 on the H2O bath I gives cinnamalacetone whose 2,4-dinitrophenylhydrazone, which can be obtained directly from I with HCl in boiling MeOH, brown-red, m. 218-20°. III, m. 109-10°, begins to evolve CO2 about 125°, gives no color in alc. with FeCl3. IV, refractive oil of faint odor, b18 136-8°.

=> 117/thu 275 L17 1019446 THU/RL L22 21 L17/THU

=> d 122 1-21 ti

L22 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

(L17 (L) THU/RL)

- TI Preparation of maleic acid derivatives as metallo- β -lactamase inhibitors
- L22 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Pyrazoles as cannabinoid receptor antagonists/inverse agonists useful for treating obesity
- L22 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Metallo- β -lactamase inhibitors containing maleic acid derivatives, and use thereof with β -lactam antibiotics
- L22 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI MAO-B inhibitors useful for treating obesity
- L22 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI MAO-B inhibitors useful for treating obesity

- L22 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Antitumoral activity of 13-demethyl or 13-substituted analogues of all-trans retinoic acid and 9-cis retinoic acid in the human myeloid leukemia cell line HL-60
- L22 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Quinoline-derived amide modulators of vanilloid VR1 receptor, and their preparation, pharmaceutical compositions, and methods of use in the treatment of pain, inflammatory, and pulmonary conditions
- L22 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI}$ Preparation of arylsulfonylpyranhydroxamates as matrix metalloprotease and/or aggrecanase inhibitors
- L22 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of indole derivatives as phospholipase enzyme inhibitors for treatment of inflammatory conditions
- L22 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of arylsulfonylpyranhydroxamates as matrix metalloprotease and/or aggrecanase inhibitors
- L22 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of retinoic acid analogs for pharmaceutical use as retinoic acid receptor modulators
- L22 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of diaryl carboxylic acids and derivatives as peroxisome proliferator-activated receptor ligands.
- L22 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of arylsulfonates as follicle stimulating hormone antagonists.
- L22 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI}$ Preparation of sulfonamides as pharmaceuticals with affinity for prostaglandin E2 receptors
- L22 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of fused thiophene derivatives as interleukin-6 and interleukin-12 production inhibitors
- L22 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of indole derivatives as phospholipase enzyme inhibitors
- L22 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of phenylalkanoic acid derivatives as peroxisome proliferator-activated receptor controllers
- L22 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of glutamic acid derivatives for the treatment of central nervous system disorders
- L22 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of 3,5-bis(amidinophenyl)pentanoates and analogs as factor Xa inhibitors
- L22 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Topical preparations containing diphenylpyraline or other compounds for treatment of skin pigmentation
- L22 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

TI preparation of substituted monocyclic aryl compounds exhibiting selective leukotriene B4 antagonist activity

=> d 122 21 ti fbib abs

L22 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

TI preparation of substituted monocyclic aryl compounds exhibiting selective leukotriene B4 antagonist activity

AN 1992:489969 CAPLUS

DN 117:89969

OREF 117:15697a,15700a

TI preparation of substituted monocyclic aryl compounds exhibiting selective leukotriene B4 antagonist activity

IN Huang, Fu Chih; Chan, Wan K.; Sutherland, Charles; Galemmo, Robert A., Jr.; Chang, Michael N.

PA Rhone-Poulenc Rorer International (Holdings), Inc., USA

SO PCT Int. Appl., 66 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.			KIND DATE			APPLICATION NO.					DATE			
ΡI	WO	9204 W:			JP,		_	1992	0319	W	0 1991-	US6448		_	19910906
		RW:					DK,	, ES,	FR,		GR, IT,				19900910
	HS	5232	948			А		1993	0803		S 1990-				19900910
		2091				A1		1992			A 1991-				19910906
	011	2001	200			111		1002	0011						19900910
	ΑIJ	9185	447			А		1992	0330		J 1991-				19910906
	_	6548				В2		1994							
										US	S 1990-	580227		А	19900910
										WO) 1991-	US6448		Α	19910906
	EP	5384	16			A1		1993	0428	EI	9 1991-	917272			19910906
	EP	5384	16			В1		1995	0809						
		R:	ΑT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB, (GR, IT,	LI, L	J, NL	, SI	Ε
										US	S 1990-	580227		Α	19900910
										WO	1991-	US6448		W	19910906
	JP	0650	3812			T		1994	0428	JI	9 1991-	515680			19910906
	JP	3341	019			В2		2002	1105						
										US	S 1990-	580227		Α	19900910
										WO	3 1991-	US6448		W	19910906

OS MARPAT 117:89969

GΙ

RCOCH₂ OCH₂CH=CHPh
$$R^1$$
COCH₂

AB Moncyclic aryl compds. having an amido substituent, a substituent group having a terminal carboxylic acid or derivative thereof, and a lipophilic

substituent were prepared as leukotriene B4 antagonists. Thus, amidation of 1,3-bis(carboxymethyl)-5-cinnamyloxybenzene (I; R = R1 = OH) (preparation given) with N-methyl-N-phenethylamine followed by esterification gave I (R = NMeCH2CH2Ph, R1 = OMe), which was saponified to give leukotriene antagonist I (R = NMeCH2CH2Ph, R1 = OH). Treatment of disorders which result from leukotriene B4 activity using these monocyclic aryl compds. are disclosed.

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-5.60

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PASSWORD:

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -3.20	TOTAL SESSION -5.60
=> logoff hold COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 30.08	TOTAL SESSION 625.78
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -3.20	TOTAL SESSION -5.60

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:46:01 ON 19 JUN 2008

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LOGINID: SSSPTA1623PA7

PASSWORD:

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COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 30.08	TOTAL SESSION 625.78
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -3.20	TOTAL SESSION -5.60
=> file reg COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 30.56	TOTAL SESSION 626.26
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) CA SUBSCRIBER PRICE	SINCE FILE ENTRY -3.20	TOTAL SESSION -5.60

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http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e 2-Butenoic acid, 2,3-dichloro-4-(methylphenylamino)-/cn
                   2-BUTENOIC ACID, 2,3-DICHLORO-4-(FORMYLMETHYLAMINO)-4-OXO-,
E1
             1
                   (2Z)-/CN
E2
                   2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYL(2-OXOETHYL)AMINO)-4-
                   OXO-, (2Z)-/CN
             1 --> 2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYLPHENYLAMINO)-/CN
E.3
E4
             1
                   2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYLPHENYLHYDRAZONO)-/CN
E5
             1
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                   ,?)-/CN
                   2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYLPHENYLHYDRAZONO)-, ME
E.6
             1
                   THYL ESTER/CN
E7
             1
                   2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYLPHENYLHYDRAZONO)-, ME
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THYL ESTER, (Z,?)-/CN2-BUTENOIC ACID, 2,3-DICHLORO-4-(PHENYLHYDRAZONO)-/CN E.8 1 E.9 2-BUTENOIC ACID, 2,3-DICHLORO-4-(PHENYLHYDRAZONO)-, (Z,?)-/C 2-BUTENOIC ACID, 2,3-DICHLORO-4-(PHENYLHYDRAZONO)-, LABELED E101 WITH CARBON-14, (Z,?)-/CN E11 1 2-BUTENOIC ACID, 2,3-DICHLORO-4-(PHENYLIMINO)-, (2Z)-/CN 2-BUTENOIC ACID, 2,3-DICHLORO-4-OXO-/CN E12 1 => e3 L23 1 "2-BUTENOIC ACID, 2,3-DICHLORO-4-(METHYLPHENYLAMINO)-"/CN

=> d 123

L23 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN

RN 623574-77-6 REGISTRY

ED Entered STN: 04 Dec 2003

CN 2-Butenoic acid, 2,3-dichloro-4-(methylphenylamino)- (CA INDEX NAME)

MF C11 H11 C12 N O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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FILE COVERS 1907 - 19 Jun 2008 VOL 148 ISS 25

FILE LAST UPDATED: 18 Jun 2008 (20080618/ED)

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=> 123

L24 1 L23

=> d 124 ti fbib abs

L24 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

TI Process for preparing highly functionalized $\gamma\textsc{-butyrolactams}$ and $\gamma\textsc{-amino}$ acids

AN 2003:892740 CAPLUS

DN 139:381742

TI Process for preparing highly functionalized $\gamma\textsc{-butyrolactams}$ and $\gamma\textsc{-amino}$ acids

IN Blazecka, Peter Garth; Davidson, James Guy, III; Zhang, Ji

PA Warner-Lambert Company LLC, USA

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

FAN.	FAN.CNT 1 PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
ΡI	WO 2003093220						A1 20031113			WO 2003-IB1646						20030417			
			AE, CO,	AG, CR,	AL, CU,	AM, CZ,	AT, DE,	AU, DK,	AZ, DM,	BA, DZ,	BB, EC,	BG, EE,	BR, ES,	BY, FI,	BZ, GB,	CA, GD,	GE,	GH,	
								IN, MD,											
						•		SE, ZA,			SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,									
			FΙ,	FR,	GB,	GR,	HU,	TM, IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
			BF,	BJ,	CF,	CG,	CI,	CM,	GA,		US 2	0.02 -	3769	91P		P 2	0020	430	
	US	2003	0225	149		A1		2003	1204		US 2	003-	3654 3769	30 01 D		20030213			
	CA 2483830				A1 20031113			1113	US 2003-365430 US 2002-376991P CA 2003-2483830 US 2002-376991P					,	2	0030	417		
											WO 2	002-	3/69 IB16	91P 46	,	P 2 W 2	0020	430 417	
	AU	2003	2194.	25		A1		2003	1117		AU 2	003-	2194	25		2	0030 0020	417	
	E.D	1499	502			7\ 1		2005	0126		WO 2	003-	IB16	46	•	W 2	0030	417	
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	BB	2003	NN 9 7	43		А		2005	n2n9		WO 2	003- 003-	IB16	46	,	W 2	0030		
	DIX	2005	0037	10		Α		2005	0203		US 2	002-	3769	91P		P 2	0020	430	
	CN	1649	827			А		2005	0803		CN 2	003-	8096	41		2	0030 0030	417	
	JP	2005	5239.	32		Т		2005	0811			002- 004-					0020 0030		
											US 2	002-	3769	91P		P 2	0020	430	
	US	2003	0236	415		A1		2003	1225			003-					0030 0030		

US	6924377	B2	20050802				
				US	2002-376991P	Р	20020430
MX	2004PA10771	A	20050307	MX	2004-PA10771		20041029
				US	2002-376991P	P	20020430
				WO	2003-IB1646	W	20030417

OS CASREACT 139:381742; MARPAT 139:381742

AΒ The invention relates to a process for preparing highly functionalized γ -butyrolactams and γ -amino acids by reductive amination of mucohalic acid or its derivs, and discloses a process for preparing pregabalin or 3-aminomethyl-5-methyloctanoic acid, GABA analogs with desirable medicinal activity. Claimed γ -amino acids have formula R1NHCH2CH(CHR2R3)CH2CO2H[R1 = alkyl, cycloalkyl, (CH2)0-3-aryl,-heterocyclyl, or -heteroaryl; R2, R3 = H, alkyl, alkenyl, cycloalkyl, alkylcycloalkyl, alkoxy, alkylphenyl, alkylphenoxy, or (un)substituted phenyl]. Thus, 1.3 g 5-(benzyloxy)-4-isopropyldihydrofuran-2-one(prepared from mucochloric or mucobromic acid) was combined with 1.7 g ammonium formate, 0.3 g 20 % Pd/C, and 0.07 g [Ir(COD)Cl]2 in 25 mL MeOH. mixture was hydrogenated at 70 °C and 20 psi for approx. 7 h to provide a mixture of pregabalin contaminated with 4-isopropylpyrrolidin-2one. The mixture may be submitted to base hydrolysis to provide exclusively pregabalin.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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                STN pricing information for 2008 now available
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        JAN 02
        JAN 16 CAS patent coverage enhanced to include exemplified
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     3
                prophetic substances
                USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWS
        JAN 28
    4
                custom IPC display formats
        JAN 28
NEWS 5
                MARPAT searching enhanced
NEWS 6
        JAN 28
                USGENE now provides USPTO sequence data within 3 days
                of publication
NEWS 7
        JAN 28
                TOXCENTER enhanced with reloaded MEDLINE segment
NEWS
        JAN 28
                MEDLINE and LMEDLINE reloaded with enhancements
NEWS
     9
        FEB 08
                STN Express, Version 8.3, now available
NEWS 10
        FEB 20
                PCI now available as a replacement to DPCI
NEWS 11
        FEB 25
                IFIREF reloaded with enhancements
NEWS 12
        FEB 25
                IMSPRODUCT reloaded with enhancements
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        FEB 29
                WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                U.S. National Patent Classification
NEWS 14 MAR 31
                IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                IPC display formats
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- NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental spectra $\,$
- NEWS 16 MAR 31 CA/Caplus and CASREACT patent number format for U.S. applications updated
- NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI
- NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
- NEWS 19 APR 04 STN AnaVist, Version 1, to be discontinued
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- NEWS 21 APR 28 EMBASE Controlled Term thesaurus enhanced
- NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements
- NEWS 23 MAY 30 INPAFAMDB now available on STN for patent family searching
- NEWS 24 MAY 30 DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option $\frac{1}{2}$
- NEWS 25 JUN 06 EPFULL enhanced with 260,000 English abstracts
- NEWS 26 JUN 06 KOREAPAT updated with 41,000 documents
- NEWS 27 JUN 13 USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications

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=>

Uploading C:\Documents and Settings\PZucker\My Documents\Examination Auxillary files\10025947\10025947 phenylhydroxysorbic.str

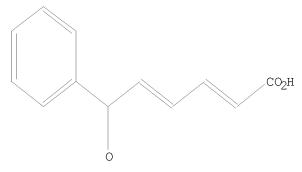
chain nodes : 2 3 4 5 6 14 15 ring nodes : 8 9 10 11 chain bonds : 1-2 2-3 2-15 3-4 4-5 5-6 6-14 ring bonds : 1-7 1-11 7-8 8-9 9-10 10-11 exact/norm bonds : 2 - 15exact bonds : 1-2 2-3 3-4 4-5 5-6 6-14 normalized bonds : 1-7 1-11 7-8 8-9 9-10 10-11

G1:CH2,O,S,N

Hydrogen count : 2:>= minimum 1 3:>= minimum 1 4:>= minimum 1 5:>= minimum 1 6:>= minimum 1 Match level : 1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR



G1 CH2, O, S, N

Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam

SAMPLE SEARCH INITIATED 08:48:41 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 30 TO ITERATE

100.0% PROCESSED 30 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 272 TO 928 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> search 11 sss full

FULL SEARCH INITIATED 08:48:49 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 657 TO ITERATE

100.0% PROCESSED 657 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 2,4-Hexadienoic acid, 6-hydroxy-6-phenyl-, (E,E)- (9CI)

MF C12 H12 O3

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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FULL ESTIMATED COST

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L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

TI Metabolites of the prototype insecticide (2E,4E)-N-isobutyl-6-phenylhexa-2,4-dienamide. 1. Synthesis, chromatography, spectroscopy, and biological activity

AN 1989:212302 CAPLUS

DN 110:212302

OREF 110:35219a,35222a

TI Metabolites of the prototype insecticide (2E,4E)-N-isobutyl-6-phenylhexa-2,4-dienamide. 1. Synthesis, chromatography, spectroscopy, and biological activity

AU Horsham, Mark A.; Class, Thomas J.; Johnston, John J.; Casida, John E.

CS Dep. Entomol. Sci., Univ. California, Berkeley, CA, 94720, USA

SO Journal of Agricultural and Food Chemistry (1989), 37(3), 777-81 CODEN: JAFCAU; ISSN: 0021-8561

DT Journal

LA English

AB Ten candidate metabolites of the prototype insecticide (2E,4E)-N-isobutyl-6-phenylhexa-2,4-dienamide (I) are prepared via a hydrozirconation procedure for stereospecific formation of the (2E,4E)-diene unit. This involves coupling vinylzirconocenes (derived from appropriately protected terminal acetylenes and dicyclopentadienylzirconium chloride hydride with vinyl halides under palladium(0) catalysis in 38-57% yield. Standard deprotection and functionalization methodol. yield the β -hydroxyisobutyl, 6-hydroxy, 6-keto, and p-hydroxy derivs. of I, the resp. carboxylic acid and amide and their l-hydroxy derivs., and the β -hydroxyisobutyl, 6-hydroxy

derivative of I. The hydroxamic acid is prepared by condensing ,O-bis(trimethylsilyl)hydroxylamine with the acid chloride followed by hydrolysis. HPLC and GC-MS readily distinguish I and its derivs. (or their methylation products) for metabolite anal. Each of the candidate metabolites synthesized is less than one-third as toxic as I to piperonyl butoxide pretreated houseflies by injection and to mice by i.p. administration.

- L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Metabolites of the prototype insecticide (2E,4E)-N-isobutyl-6-phenylhexa-2,4-dienamide. 2. Formation in mouse and rat liver microsomal systems, rat hepatocytes, and houseflies
- AN 1989:207488 CAPLUS
- DN 110:207488
- OREF 110:34327a,34330a
- TI Metabolites of the prototype insecticide (2E, 4E)-N-isobutyl-6-phenylhexa-2,4-dienamide. 2. Formation in mouse and rat liver microsomal systems, rat hepatocytes, and houseflies
- AU Johnston, John J.; Horsham, Mark A.; Class, Thomas J.; Casida, John E.
- CS Dep. Entomol. Sci., Univ. California, Berkeley, CA, 94720, USA
- SO Journal of Agricultural and Food Chemistry (1989), 37(3), 781-6 CODEN: JAFCAU; ISSN: 0021-8561
- DT Journal
- LA English
- AB The metabolism of (2E, 4E)-N-isobutyl-6-phenylhexa-2,4-dienamide is examined as

prototype of the natural and synthetic isobutylamide insecticides. Nine metabolites from mouse and rat liver microsomal systems, rat hepatocytes, and/or) houseflies are identified by HPLC, GC, and GC-mass spectrometric comparisons with synthetic stds. The parent isotubylamide yields the corresponding unsubstituted amide and N-methylene hydroxylation in the microsomal oxygenase system. Both of these amides are readily hydrolyzed by rat but not mouse amidases. The unsubstituted amide in mouse microsomes appears to undergo sequential enzymic oxidation and hydrolysis to the corresponding carboxylic acid; the presumed hydroxamic acid intermediate is not detected. Addnl. metabolites are the β -hydroxyisobutyl, 6-hydroxy, 6-keto, and p-hydroxy derivs. of the parent isobutylamide and the 6-hydroxy derivs. of the N-(β hydroxyisobutyl) compound and of the unsubstituted amide and carboxylic acid. Hepatocytes conjugate some of these metabolites. The persistence and toxicity of this prototype insecticide are limited by oxidative metabolism at multiple sites in the iso-Bu and benzyl moieties.

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